

setting a scan term during which said pixels are rendered opened or closed such that said scan term is shorter than a holding time during which said liquid crystal shutter keeps said maximum transmittance; and

setting a reset term during which all said pixels are rendered closed by applying voltage to all said pixels before said scan term.

20. (New) The method of driving a liquid crystal shutter according to claim 19, further comprising a step of applying a positive or negative driving voltage to said pixels of said liquid crystal shutter during a partial period within said scan term and applying a driving voltage of 0V to said pixels during a remaining period within said scan term,

wherein said remaining period during which said driving voltage of 0V is applied is varied, in order to perform a gradation display.

21. (New) The method of driving a liquid crystal shutter according to claim 19, further comprising a step of applying voltage to said pixels of said liquid crystal shutter during said scan term, wherein said voltage applied in said scan term is varied from 0V in order to perform a gradation display.

22. (New) The method of driving a liquid crystal shutter according to claim 19, further comprising at least one of the following steps:

lengthening said scan term at a time of a low operating temperature, and

shortening said scan term at a time of a high operating temperature.

23. (New) A method of driving a liquid crystal shutter including: a nematic liquid crystal having a twisted angle equal to or greater than  $180^\circ$  sandwiched between a pair of substrates; a pair of polarizing plates having respective absorption axes which are substantially orthogonal to each other and angled within a range of  $\pm 40^\circ$  to  $\pm 50^\circ$  relative to a direction in which intermediate liquid crystal molecules are oriented; and pixels, which demonstrates an initial opened state at no applied voltage after another opened state exhibiting maximum transmittance higher than a transmittance in said initial opened state when voltage applied to said pixels is turned off, said method comprising steps of:

setting a scan term during which said pixels are rendered opened or closed such that said scan term is shorter than a holding time during which said liquid crystal shutter keeps said maximum transmittance; and

setting a reset term during which all said pixels are rendered closed by applying voltage to all said pixels before said scan term.

24. (New) A method of driving a liquid crystal shutter including: a nematic liquid crystal having a twisted angle equal to or greater than  $180^\circ$  sandwiched between a pair of substrates; a pair of polarizing plates having respective absorption axes which are substantially orthogonal to each other; and pixels, which demonstrates an initial opened state at no applied voltage after another opened state exhibiting maximum transmittance higher than transmittance in said initial opened state when

By: Yasushi KANEKO et al.  
Serial No. 09/887,092

Group Art Unit: 2871  
Examiner: Dung T. Nguyen

voltage applied to said pixels is turned off, and wherein  $\Delta n d$  value lies within a range of 600 to 900 nm, said  $\Delta n d$  value being a product of a birefringence  $\Delta n$  of said nematic liquid crystal and a gap  $d$  between said pair of substrates, said method comprising steps of:

01/2012.  
setting a scan term during which said pixels are rendered opened or closed such that said scan term is shorter than a holding time during which said liquid crystal shutter keeps said maximum transmittance; and

setting a reset term during which all said pixels are rendered closed by applying voltage to all said pixels before said scan term.

#### REMARKS

Claims 4-18 are herein canceled. New claims 19-24 are added, which find support throughout the specification, and especially on page 17, line 1 to page 21, line 1, and Figs. 6 and 7.

As to new claim 19, the limitation of "a liquid crystal shutter" is minimized to include present claims 4 and 9. New claims 20-22 are depending claims including limitations relative to original claims 5, 6 and 8, respectively.

#### Claim Rejections under 35 U.S.C. §112, second paragraph

Claims 4-18 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.